

VUKALOVICH, M.P., doktor tekhn.nauk, prof.; ARTYM, R.I., inzh.

Calculation of thermodynamic function of polyatomic molecules in an ideal gaseous state. Teploenergetika 10 no.4:75-78 Ap '63.
(MIRA 16:3)

1. Moskovskiy energeticheskiy institut.
(Steam—Thermal properties)

VUKALOVICH, M.P.; ALTUNIN, V.V.

Thermophysical properties of carbon dioxide. Part 1:
Second virial coefficient. Teplofiz. vys. temp. 1
no.2:182-190 S-O'63. (MIRA 17:5)

1. Moskovskiy energeticheskiy institut.

ACC NR: AM6015017

Monograph

UR

Vukalovich, M. P.; Altunin, V. V.

Thermophysical properties of carbon dioxide (Teplofizicheskiye svoystva dvuokisi ugleroda) Moscow, Atomizdat, 1965. 454 p. illus., biblio., tables. 2050 copies printed.

TOPIC TAGS: carbon dioxide, thermodynamics, thermodynamic property, thermodynamic equilibrium

PURPOSE AND COVERAGE: The thermophysical properties of carbon dioxide are presented. Published experimental and theoretical data on basic thermodynamic characteristics are analyzed. Each subchapter has its own bibliography. The book is intended for engineers and scientific workers studying thermophysical properties of matter and related physico-chemical problems.

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UDC: 661.97

ACC NR:AM6015017

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8. Coefficients of viscosity, self-diffusion, thermal conductivity, and the Prandtl number at atmospheric pressure -- 365

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ACC NR: AM6015017

9. Dependence of carbon dioxide of the viscosity on pressure -- 392

10. Dependence of thermal conductivity of carbon dioxide on pressure
-- 432

SUB CODE: 07/ SUBM DATE: 8Oct65/ ORIG REF: 239/ OTH REF: 509/

Card 3/3

L 29794-66 EWT(m)/ETC(f)/ENP(t)/ETI IJP(c) PS/RDW/JD

ACC NR: AP6015067

(N)

SOURCE CODE: UR/0363/66/002/005/0844/0849

AUTHOR: Vukalovich, M. P.; Fedorov, V. I.; Okhotin, A. S.; Glazov, V. M.

ORG: Moscow Power Institute (Moskovskiy energeticheskiy institut); Moscow Institute of Steel and Alloys (Moskovskiy institut stali i splavov)

TITLE: Study of the heat conductivity of antimony and bismuth tellurides in the liquid phase
27 27 27

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 5, '1966, 844-849

TOPIC TAGS: bismuth compound, antimony compound, telluride, heat conductivity, electric conductivity, phonon scattering, *semiconductor research*

ABSTRACT: A technique was developed for measuring the heat conductivity of liquid semiconductors by determining the radial heat flux in a ring gap with the aid of graphite cylinders which insure reliable and reproducible results. The temperature dependence of the heat conductivity of antimony and bismuth tellurides was thus measured in the liquid state up to 1200°C and its linear increase during heating was demonstrated. The electronic component of the heat conductivity was determined in

Card 1/2

UDC: 546.86'241 + 546.87'241

L 29794-66

ACC NR: AP6015067

melts of these compounds on the basis of electrical conductivity data. The mechanism of heat conductivity in liquid Bi_2Te_3 and Sb_2Te_3 -type semiconductors was found to be due (in addition to the electronic and lattice components) to a third component related to liquid and phonon-liquid scattering. A correlation was noted between the results obtained and the data of physicochemical analysis of the binary liquid systems Bi-Te and Sb-Te. Orig. art. has: 6 figures.

SUB CODE: 20/ SUBM DATE: 24Aug65/ ORIG REF: 015/ OTH REF: 006

Card 2/2

VUKALOVICH, M.P., prof., doktor tekhn. nauk; RASSKAZOV, D.S., kand. tekhn. nauk; POPOV, V.N., kand. tekhn. nauk; BABIKOV, Yu.M., inzh.

Heat properties of monoisopropyldiphenyl. Teploenergetika 11 no.6:
56-58 Je '64. (MIRA 18:7)

1. Moskovskiy energeticheskiy institut.

VUKALOVICH, M.P., doktor tekhn. nauk, prof.; SYCHEV, V.V., kand. tekhn. nauk

International program for studying thermal and physical properties of
water and water vapor. Teploenergetika 12 no.4:94-95 Ap '65.

(MIRA 18:5)

VUKALOVICH, M.P., doktor tekhn. nauk, prof.; MASALOV, Ya.F., inzh.

Experimental study of the enthalpy of carbon dioxide at
temperatures up to 500° C and pressures to 100 bar.
Teploenergetika 11 no.11:75-77 N '64. (MIRA 17:12)

1. Moskovskiy energeticheskiy institut.

VUKALOVICH, M.P., doktor tekhn. nauk, prof.; MASALOV, Ya.F., inzh.

Experimental study of the enthalpy of carbon dioxide. Teplo-
energetika 11 no.7:78-82 J1 '64. (MIRA 17:8)

1. Moskovskiy energeticheskoy institut i Energeticheskoy institut
imeni G.M. Krzhizhanovskogo.

OSIPOVA, Varvara Aleksandrovna; SHLYKOV, Yu.P., kand. tekhn. nauk,
retsenzent; VUKALOVICH, M.P., doktor tekhn. nauk, prof.,
red.; SINEL'NIKOVA, L.N., red.

[Experimental study of heat-exchange processes] Eksperi-
mental'noe issledovanie protsessov teploobmen. Pod red.
M.P.Vukalovicha. Moskva, Izd-vo "Energia," 1964. 327 p.
(MIRA 17:6)

VUKALOVICH, Mikhail Petrovich; MELEYEV, A.S., red.

[Tables of the thermodynamic properties of water and water vapor] Tablitsy termodinamicheskikh svoistv vody i vodianogo para. Izd.7., perer. i dop. Moskva, Gosenergoizdat, 1963. 401 p. (MIRA 17:5)

ANDRIANOVA, Tamara Nikolayevna; DZAMPOV, Boris Vasil'yevich;
ZUBAREV, Vladimir Nikolayevich; REMIZOV, Serafim
Aleksandrovich; VUKALOVICH, M.P., prof., red.;
SINEL'NIKOVA, L.N., red.; BUL'DYAYEV, N.A., tekhn. red.

[Problems in industrial thermodynamics] Sbornik zadach po
tekhnicheskoi termodinamike. [By] T.N.Andrianova i dr.
Moskva, Izd-vo "Energia," 1964. 199 p. (MIRA 17:3)

VUKALOVICH, M.P.; ALTUNIN, V.V.; TIMOSHENKO, N.I.

Thermodynamic properties of carbon dioxide at temperatures of
0-1000°C and pressures up to 100 bars. Atom. energ. 15 no.3:
210-214 S '63. (MIRA 16:10)

(Carbon dioxide—Thermodynamic properties)

ACCESSION NR: AP4004138

S/0294/63/001/002/0182/0190

AUTHORS: Vukalovich, M. P.; Altunin, V. V.

TITLE: Thermophysical properties of carbon dioxide. 1. The second virial coefficient

SOURCE: Teplofizika vy"sokikh temperatur, v. 1, no. 2, 1963, 182-190

TOPIC TAGS: combustion product, carbon dioxide, second virial coefficient, equation of state, compressibility, viscosity, acoustic velocity, heat transfer fluid, heat exchanger, carbon dioxide compressibility, carbon dioxide viscosity, carbon dioxide acoustic velocity

ABSTRACT: Results are reported of a determination of the second virial coefficient of CO_2 from measurements of compressibility, throttle effect, velocity of sound, and viscosity. The data have

Card 1/42

ACCESSION NR: AP4004138

been gathered from all the experimental reports of measurements at not too high densities. Exact measurements of the virial coefficient not only yield reliable values of thermodynamic functions at low pressures, but also valuable information on the character of intermolecular forces in the investigated substance. Comparison of the values obtained by different methods yields an objective criterion for estimating the thermodynamic functions and their consistency. The discrepancies between the different experimental data are discussed and it is pointed out that more research is necessary to reconcile them. Orig. art. has: 4 figures, 21 formulas, and 1 table.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Engineering Institute)

SUBMITTED: 01Sep63

DATE ACQ: 26Dec63

ENCL: 02

SUB CODE: AS, PR

NO REF SOV: 007

OTHER: 031

Card 2/3

VUKALOVICH, M.P.; ALTUNIN, V.V.; BLINOV, V.V.

Thermophysical properties of carbon dioxide. Part 2: Transfer coefficients at atmospheric pressure and temperatures of 200° to 1700°K. Teplofiz. vys. temp. 1 no.3:356-367 N-D '63. (MIRA 17:3)

1. Moskovskiy energeticheskiy institut.

VUKALOVICH, M.P., doktor tekhn. nauk, prof.; CHERNEYEVA, L.I., kand. tekhn.
nauk

Experimental study of the heat transmission coefficient of
water vapor at temperatures up to 660°C and pressures $1,500\text{ kg/cm}^2$.
Teploenergetika 10 no.9:71-76 S '63. (MIRA 16:10)

1. Energeticheskiy institut imeni G.M. Krzhizhanovskogo.
(Water—Thermal properties)

VUKALOVICH, M.P.; GROMOV, N.K.; IMERITSKIY, M.I.; KARTOSHKIN,
M.D.; KOBRINA, R.B.; LEONOVA, A.Ya.; TROYANSKIY, Ye.A.;
MANUYLOV, P.N.; SHUKHER, S.M., red.

[Heat engineer's handbook] Spravochnaia knizhka teplo-
tekhnika. Izd.2., perer. i dop. Moskva, Energiia, 1964.
287 p. (MIRA 17:12)

VUKANOVIC, B.

VUKANOVIC, B. Specifications of the standard for hand tools in mining. p. 155.

No. 6, June 1955
STANDARDIZACIJA
Beograd, Yugoslavia

So: Eastern European Accession Vol. 5 No. 4 April 1956

RISTIC, Slobodan; VUKANOVIC, Damjana

Spectrochemical analysis of the ash of a plant from Lake Ohrid.
Gl hem dr 23/24 no.5/6:339-347 '58/59. (EEAI 10:4)

1. Prirodno-matematički fakultet, Fizickohemijski zavod, Beograd;
Institut za nuklearne nauke "Boris Kidric," Beograd.
(Yugoslavia--Fresh-water biology)
(Spectrochemistry) (Phosphorus)
(Iron) (Rubidium) (Lithium)

RISTIC, Slobodan; VUKANOVIC, Damjana

Spectrochemical and flame photometric analysis of some samples of
crude salt of the Ulcinj Salt Factory. Gl hem dr 23/24 no.5/6:
349-357 '58/59. (EEAI 10:4)

1. Fakulty of Sciences, Institute for Physical Chemistry, Beograd.
(Montenegro--Salt) (Spectrochemistry)
(Flame photometry)

VUKANOVIC, Branko.

Mining Beograd, Izdavacko Stamparsko preduzece Saveta za energetiku i ekstraktivnu industriju vlade FNRJ, 1950-

4 FN - 96

VUKANOVIC, T.P.

"Problems of the daily migration in Bosnia and Hercegovina"
by Muhubija Kreso. Reviewed by T.P. Vukanovic. Glas Srp
geogr dr 42 no.1:81-83 '62.

PODHORSKY, Rikard, dr ing.

"Laboratory manual" by S. Asperger, N. Bolegisanin, D. Cvjeticanin, Z. Dizdar, N. Dogramadzi, I. Filipovic, M. Juric, M. Mirnik, M. Petrovic, P. Sabioncello, K. Schulz, and V. Vukanovic. Edited by Ivan Filipovic and Petar Sabioncello. Reviewed by R. Podhorsky. Kem ind 10 no.12:486-487 D '61.

1. Clan Redakcionog odbora, "Kemija u industriji".

VUKANOVIC, Tatomir

Characteristics of the commune of Cacak from the viewpoint of
social geography after the 1961 census. Glas Srp geogr dr 43
no. 2:127-144 '63.

YUGOSLAVIA/Physical Chemistry. Radiochemistry. Isotopes.

D

Abs Jour: Ref Zhur-Khin., No 15, 1958, 49486.

Author : Vukanovich, Vladimir M.

Inst :

Title : Mobility of Deuteron in Palladium Under the Action
of an Electric Field.

Orig Pub: Glasnik Khen. drushtva, 1957, 22, No 2, 81-86.

Abstract: The previously described method (Coehn A., Juergens H., Z. phys., 1931, 71, 179) was utilized to determine mobility of deuteron and hydrogen in Pd-wire under the action of a constant electric field at current intensity 1.25-2.6 a and a temperature 25-26.5. Measurements were carried out after a period from 2 to 10 days following dissolution of deuteron or hydrogen in Pd, by the method of ob-

Card :1/2

VUKANOVIC, Vladimir (Belgrade, Yugoslavia)

Transport processes in the arc plasma. *Magy kem folyoir* 71
no.2:82-88 F '65.

1. Submitted June 30, 1964.

A method has been developed of the spectrochemical analysis of U_3O_8 for certain, in nuclear-chemical respect interesting elements without previous separation. The procedure for qualitative detection of P, Cd, V, Mo, Mn, Fe, Cr, Cu, Ni, Li, the semi-quantitative determination of V, Mo, Mn, Fe, Cr, Cu, Ni, Li, and quantitative determination of B and Cd has been described. A detectability of 3.05 ppm for B, 0.1 ppm for Cd, 1 ppm for Fe, Cr, Cu, V, Li, 1 ppm for Mn, 0.1 ppm for Ni, and 1 ppm for Ni has been obtained. B and Cd have been determined quantitatively in the range of concentration 0.1 to 10 ppm with standard deviations of 1% for B and 1.5% for Cd (both).

17/10/86
T. J. King

KERTAI, P.; FORIS, G.; VUKAN-SAJGO, K.; unter technischer Mitarbeit von:
PALLA-SZUCHOVSKY, I.; DRINOCZY, L.

Studies on experimental leukopenia and leukocytosis in parabiotic rabbits. Acta physiol. acad. sci. hung. 20 no.4:405-410 '61.

1. Pathophysiologische abteilung des staatlichen hygienischen instituts, Budapest.

(LEUKOPENIA exper) (LEUKOCYTOSIS exper)
(PARABIOSIS)

8
2-may
2

Distr: 4E3d/4E2c(j)

✓ Distribution of hydrogen isotopes in deuteriomethanes in electrical discharge and at high temperature. ¹¹ Natalija N. Dogramanli, Vukica M. Radak, and Vladimir M. Vukobratovic. Bull. Inst. Nuclear Sci. "Boris Kuvshinov" (Belgrade) 8, 85-8 (1958).—The mechanism of the decompn. of CH_3D (I) was studied by using pure CH_3D (I) in a quartz tube. I was prepd. from MeMgI and 99.5% D_2O . At 1 to 2 mm. and with an a.c. of 200 to 250 ma. for 10 min., about 90% I is decompd., and the formation of CH_3D_2 is preferred. The main exchange reaction is suggested to proceed between methylene radicals and H atoms. The H-D ratio is changed in favor of D. At 1000° and under a pressure of 20 mm., about 50% I is decompd. and the formation of CH_3 is preferred. The formation of CHD_2 is observed as a product in both expts. W. W. Rabe

JK
JH

VUKAS, A.

Personal experiences with VDRL test in syphilis; comparison with Kahn's test and Meinicke's clearing test. Higijena, Beogr. 8 no. 1:73-79 1956.

1. Department of Dermatovenereology, General Hospital, Susak, Rijeka.

(SYPHILIS, diag.

VDRL test, comparison with Kahn's and Meinicke tests (Ser))

VUKAS, Ante

Treatment of acne vulgaris with derma-abrasion. Srpski arh. celok.
lek. 89 no.5:585-591 My '61.

1. Dermatoveneroloski odjel Opste bolnice Susak-Rijeka. Sef: doc.
dr Ante Vukas.

(ACNE surg)

VUKAS, Ante, Dr.

Etiology of professional skin diseases. Lijec. vjes. 78 no.
5-6:220-226 May-June 56.

1. Iz Dermatoveneroloskog odjela Opce bolnice Susak u Rijeci.
(SKIN DISEASES, etiol. & pathogen.
occup (Ser))
(OCCUPATIONAL DISEASES, etiol. & pathogen.
occup. skin dis. (Ser))

VUKAS, Ante, Prim., doc. dr.

Local use of hydrocortisone in dermatology. Med. glas. 10
no.6:223-225 June 56.

1. Dermatoveneroloski odjel Opce bolnice Susak na Rijeci.
(HYDROCORTISONE, ther. use
skin dis. (Ser))
(SKIN DISEASES, ther.
hydrocortisone (Ser))

VUKAS, Ante, doc. dr

Treatment of facial scars. Process of skin regeneration. Med.glasn.
14 no.6:349-350 Je'60

1. Dermatoveneroloski odjel Opce bolnice Susak na Rijeci.
(FACE surg)
(CICATRIX surg)

VUKASIN, ILIC

YUGOSLAVIA/Pesticides.

H.

Abs Jour : Ref Zhur - Khimiya, No 19, 1958, 65418

Author : Ilic Vukasin

Inst : -

Title : Protection of Cereals.

Orig Pub : Zast. mater., 1957, 5, No 9-10, 337-343.

Abstract : No abstract.

Card 1/1

VUKASIN, I.

YUGOSLAVIA/Chemical Technology. Chemical Products and Their
Application. Food Industry.

H

Abs Jour: Ref Zhur-Khim., No 13, 1958, 44896.

Author : Illic Vukasin.

Inst : _____

Title : Paste Articles of Food.

Orig Pub: Prehranbena ind., 11, No 5, 71-77.

Abstract: Summary information on production technology
including photographs of the equipment.

Card : 1/

VUKASIN, MASNIKOSA

APPROVED FOR RELEASE: 09/01/2001

Semiconductors

H-6

CIA-RDP86-00513R001961220018-1"

Abs Jour : Ref Zhur - Fizika, No 7, 1958, No 16078

Author : Masnikosa Vukasin

Inst : Not Given

Title : Physical Properties of Transistors

Orig Pub : Telekomunikacije, 1957, 6, No 1, 6-15

Abstract : Survey article, Contains a brief exposition of the theory
of semiconductors on the basis of which are considered the
formation of the potential barrier on the boundary of the semi-
conductor and the phenomena on the contacts between the semi-
conductor and metals or other semiconductors. Also consid-
ered is the mechanism of amplification in a transistor. The
fundamental relations of the physical characteristics of
transistors are given.

Card : 1/1

VUKASINOVIC, D.

Material and financial resources of our clubs. p. 162.

RADIOAMATER. (Savez radiomatera Jugoslavije)
Beograd, Yugoslavia. Vol 12, no. 6, June 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 8, Aug. 1959.

Uncl.

JOVANOVIĆ, Vasilije; MIRKOVIĆ, Dušana; VUKASINOVIĆ, Nedžad

Nephrotic syndrome in a pair of twins. Srpski arh. celok. lek.
90 no.6:634-640 Je '62.

1. Interno odeljenje Gradske bolnice u Beogradu Sef: prof.
dr. Mihailo Andrejevic.
(NEPHROTIC SYNDROME) (TWINS)

5

TOMIC, Jure, sanitetski potpukovnik, dr.; VUKASINOVIC, Rajko,
sanitetski kapetan, dr.

A severe form of staphylococcal septicemia with endocarditis.
Vojnosanit. pregl. 20 no.1/2:56-58 Ja-F '63.

1. Medicinski centar RM u Splitu, Interno odeljenje.
(ENDOCARDITIS, BACTERIAL)
(STAPH INFECTIONS)
(ANTIBIOTICS)

5

VUKAS, Ante, dr.

Abrasion of the skin in dermatology. Lijec. vjes. 82 no.4:315-321 '60.

1. Iz Dermatološkog odjela Opće bolnice Susak u Rijeci.
(SKIN surg.)

VUKASINOVIC, MILAN

YUGOSLAVIA/Chemical Technology - Chemical Products and Their
Application, Part 1. - Water Treatment, Sewage.

H-5

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 21905

Author : Milan Vukasinovic

Inst : ~~_____~~

Title : Problem of Heat Utilization and Deodorizing of Sewage of
Textile Industry.

Orig Pub : Tekstil, 1956, 5, No 8, 642-643

Abstract : The sewage from autoclaves for manufacturing artificials
fibers has a temperature above 100° and a disagreeable
odor. The computation of the heat exchanger for sewage
cooling is presented. Sewage loses its odor after cool-
ing and is purified. The hot cooling water is utilized
in manufacturing.

Card 1/1

VUKASINOVIC, V.

Problem of cooling and deodorizing waste water in the textile industry.
p. 642. TEKSTIL. (Društvo inženjera i tehničara tekstilaca Hrvatske)
Zagreb. Vol. 5, no. 8, Aug. 1956.

SOURCE: East European Accessions List, (EEAL), Library of Congress,
Vol. 5, no. 12, December 1956

ANDREJEVIC, Mihailo; MITROVIC, Mitar; ALEKSIC, Aleksandar; VUKASINOVIC,
Nadezda; ZIVKOVIC, Milutin

Cases of Schoenlein-Henoch syndrome. Srpski arh. celok. lek. 88
no.5:579-584 My '60.

1. Interno odeljenje Gradske bolnice u Beogradu. Sef: prof. dr
Mihailo Andrejevic. Hirursko odeljenje Gradske bolnice u Beogradu.
Sef: prof. dr Mitar Mitrovic.

(PURPURA case reports)

VUKASINOVIC, S.

Terminology of field capacity and a suggested method for its determination.

2. 213 (ZEMLJISTE I BILJEHA) (Beograd, Yugoslavia) Vol. 5, no. 1/2, Jan./Dec. 1956

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5. 1958

VUKASINOVIC, S.

Lumbago and lumbosacralgia among railroad personnel. p.311. ZELEZNICE.
Beograd. Vol. 11, no. 9, Sept. 1955.

SOURCE: East European Accessions List (EEAL), Library of Congress
Vol. 5, No. 6, June 1956

VUKASINOVIC, Z.

Calibrating electric detonators and determining the strength of power to
explode them. p. 434
VOJNO-TEHNICKI GLASNIK. Beograd. Vol. 4, no. 6, June 1956

SOURCE: East European Accessions List, (EEAL), Library of Congress,
Vol. 5, no. 12, December 1956

VUKASOVIC, P.

Great individual variations in the hatching of irregularly hibernated eggs of Lymantria dispar L. p. 127. (Belgrade. Prirodnjacki muzej srpske zemlje. GLASNIK. BULLETIN. SERIJA B: BIOLOSKE NAUKE. Beograd.) Vol, no. 3, 1955.

SOURCE: East European Accessions List, (EEAL) Library of Congress, Vol. 5, No. 8, August, 1956.

VUKASOVIC, P., GLADILIN, N.

~~The study of various types of Anopheles maculipennis Meig at~~
Pec. Prizren and surroundings. Glas.hig.inst., Beogr. 4 no.1-2:
41-50 Jan-June '55.

(MOSQUITOES,

Anopheles maculipennis, study of various types, in
Serbia, Yugosl.(Ser))

VUKASOVIC, P.; BORJANOVIC, S.; MARTINOVIC, A.

Preliminary studies on resistance of human lice (*pediculus humanis corporis*); resistance of insects to insecticides. Glasn. Hig. Inst., Beogr. 5 no.1-2:1-40 Jan-June 56.

(PEDICULI, eff. of drugs on
insecticides on body lice (Ser))
(INSECTICIDES, eff.
on body lice (Ser))

1st and 2nd Series																										3rd and 4th Series																																																																																																							
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<p>Use of DDT and Gammaxane for control of <i>Acanthoscelides</i> <i>obtectus</i> Say, P. Vukasyid (Plant Protect., Belgrade, 1950, 1, No. 2, 101--104).--Grain is maintained free of infestation by dusting with powders containing DDT or Gammaxane. R. TRUECOM.</p>																																																																																																																																	
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VUKASOVIC, P.

DARVAS, Andrija, biolog; Tehnicka saradnja: Petar Vukasovic, san. tehn.,
Dusan Perisic, san. tehn.

Results of the investigation of Anopheles maculipennis reactivity
to DDT and other insecticides in Bosnia and Hercegovina. Med. arh.,
Sarajevo 12 no.2:145-159 Mr-Apr '59.

1. Centralni higijenski zavod NRBiH, direktor: d-r Ante Jamnicki;
Parazitolosko odjeljenje, nacelnik: d-r I. Gruzic.
(MOSQUITO CONTROL)

YUGOSLAVIA / General and Special Zoology. Insects. F
General Problems.

Abs Jour: Ref Zhur-Biol., No 14, 1958, 63804.

Author : Vukasovic, P.

Inst : Not given.

Title : Great Individual Variations in the Hatching of
the Gypsy Moth Larvae from Hibernated Eggs.

Orig Pub: Glasnik biol. ser. Hrbatsko prirodosl. drustvo,
1953 (1955), ser. 2B, 7, 377-378.

Abstract: A note on the differences and length of develop-
ment of the eggs and on the process of larvae
hatching depending on laboratory temperatures.

Card 1/1

VUKASOVIC, F.

Contribution to the study of species of *Anopheles maculipennis* Meig
(Anophelinae, Culicidae) in the Pancevo Swamp and surrounding area in
1949-50, p. 265, (GLASNIK, No. 5/6, 1953, Belgrade, Yugoslavia)

SO: Monthly list of East European Accessions, (EEAL), LC, Vol. 4, No.1
Jan. 1955, Uncl.

VUKASINOVIC, N.

VARAGIC, V.; VUKASINOVIC, R.

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eff. of iproniazid)

(TYRAMINE, tox.

same)

(NICOTINIC ACID ISOMERS, eff.

on tox. of epinephrine & tyramine)

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5

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C-2

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Inst :
Title : A Preliminary Study of Resistance of the Human Body
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Orig Pub : Glasnik Khig. in-ta 1953, 5, No 1-2, 1-40
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Card 1/1

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Orig Pub: Arhiv poljopr. nauke, 1956, 9, No 26, 59-76.

Abstract: The leafy feed provided by the ash tree and the various oak trees of Hercegovina was studied. It was found that the earlier the hay is made, the higher is the nutrient content of the leafy feed. Although the oak leaves contain a higher amount of raw protein, the leafy feed derived from the ash tree is more valuable since

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Uncl.

VUKOBENIC, R.

The importance of fisheries at Lake Scutari.

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20: Monthly Index of East European Accessions (MIEA) 10 Vol. 7, No. 6, 1958

CA

17

Identification of some reagents. I. V. Vukobratović, Kovačević (Univ. Zagreb, Yugoslavia). Farm. Glasnik 6, No. 7, 113-21(1960).—Chem. reactions are described for the identification of the following reagents of the new Yugoslav Pharmacopoeia: NH_4 , molybdate, NH_4 , thiocyanate, NH_4 , vanadate, SbCl_5 , SnCl_4 , KIO_4 , KClO_4 , and Na_2SO_4 . II. Ibid. No. 8, 137-46.—Reactions are described for the chem. identification of the following reagents of the new Yugoslav Pharmacopoeia: CrO_3 , CuCl_2 , $\text{Cu}(\text{NO}_3)_2$, ferric ammonium sulfate, phosphomolybdic acid, K_2CrO_4 , $\text{K}_2\text{Cr}_2\text{O}_7$, $\text{K}_3\text{Fe}(\text{CN})_6$, $\text{K}_4\text{Fe}(\text{CN})_6$, Na cobaltinitrite, Na nitroprusside, and granular Zn. III. Ibid. No. 9, 171-5.—Reactions are described for the identification of the following reagents listed in the new Yugoslav Pharmacopoeia: NH_4 , oxalate, K oxalate, K quabcol sulfonate, cupric acetate, and AcONa . B. J. Froelich.

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"Ten years of fisheries at Lake Scutari."

p. 257 (Morsko Ribarstvo) Vol. 9, no. 10, Oct. 1957
Rijeka, Yugoslavia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

Chemical composition of the alcohols in dammar resin. D. Barborić and V. Vukčević-Korčević (Inst. of Pharmaceutical Chemistry and the Chemical Lab., Philos. Faculty, Zagreb). *Arhiv Kem.* 18, 66-74 (1946) (in English, 74-75).—In 2 previous studies (C.A. 33, 40364-4) it was found that dammar resin contains compds. of alc. character and that the α -dammar resin likewise consists of alcs. This portion of the resin, constituting 0.5 of the total resin, is neutral, dissolves in alc., and can be oxidized. From the oxidation product was isolated a cryst. product, $C_{28}H_{48}O_2$ (Barborić: *Dis.*, Zagreb, 1940), and C.A. 33, 40306). In the present study it was possible to isolate sep. components of the complex mixt. and to oxidize the alcs. of the dammar resin with CrO_3 in HOAc. From the reaction product were isolated 2 lactones as a mixt. of their K salts which could be sepl. from each other by fractional crystn. from EtOH since one was much more sol. than the other. Further expts. showed that the alcs. of the dammar resin do not contain lactone groupings; they most probably belong to the triterpene class of compds., while the lactones obtained, with their much smaller mol. wts., were probably the product of oxidative degradation of the original alcs. Oxidation of the alcs. in dammar resin and purification of the product: The alc. mixt. (isolated from dammar resin) (100 g.) in 1 l. HOAc was heated to 40–50°, and 50 g. CrO_3 in a little H_2O , as well as 600 cc. 96% HOAc, was added in small portions, with const. stirring, within 0.5 hr., the mixt. allowed to stand another 30 min., 150 cc. 96% H_2SO_4 added, the soln. poured into 10 l. H_2O acidified with H_2SO_4 , and the ppt. obtained filtered off, washed first in warm H_2O acidified with H_2SO_4 , then in cold H_2O , then dried by warming slightly. The crude product was purified by dissolving in HOAc and reprecip. from H_2O acidified with H_2SO_4 , the process being repeated 2–3 times. Sepn. of the oxidation product of dammar resin alcs. into components: Dissolve 50 g. of the purified oxidation product in 30 cc. alc. with heating, add 5 cc. 30% KOH, and dil. with H_2O to 10 l. From the colloidal soln. a mixt. of K salts of the 2 lactones, L_1 and L_2 , is isolated by pptn. with 30% KOH. The pptn. is

show and the soln. The ppt. is filtered off, washed with let stand 12 hrs. The ppt. is filtered off, washed with H_2O , alkalinized with KOH, redissolved in H_2O , and again pptd. with 30% KOH; this is repeated once or twice. The final ppt. is filtered off, washed with a little water, and dried in air. Separation of lactone L_1 from lactone L_2 is achieved by suspending the above salt mixt. in 150 cc. acetone, adding a little KOH soln. (30%), and letting stand several hrs. The salt of L_1 goes into soln. together with the neutral product mentioned above, while that of L_2 ppts. out, is filtered off, washed with acetone, and dried in air. Addn. of 15% KOH (several cc.) to the filtrate produces within several hrs. sepn. of a neutral product as an oily layer sinking to the bottom. The supernatant fluid is decanted, poured into water alkalinized slightly with KOH, and acidified with HCl. This causes pptn. of the salt of L_1 with some traces of that of L_2 and other impurities. To the reaction mixt. is added KOH soln. to alk. reaction, whereupon a part of the ppt. (the impurities) redissolves. The remaining ppt. is filtered off, washed in H_2O slightly alkalinized with KOH, dried, and again suspended in acetone. The undissolved portion represents the traces of L_2 salt, which is filtered off, washed with acetone, and dried in air. The acetone filtrate is poured into sufficient water and the addn. of HCl causes decompn. of the salt of L_1 and permits isolation of lactone L_1 . Purification and properties of the lactone L_1 , $C_{28}H_{48}O_2$, mol. wt. 398.6: The crude lactone, dissolved in alc. with heating, is poured with stirring into water acidified with HCl and more HCl is added to acid reaction. The mixt. is left standing until a ppt. forms. The latter is filtered off, washed with water, and redissolved in alc. and the soln. is decolorized with charcoal and concd. until the lactone L_1 ppts. out. The soln. in alc. and pptn. from water acidified with HCl is repeated several times. The pure product (yield, 6% of the total wt. of alcs.), colorless needles, m. 216°, mol. wt. (detd. by the method of Szwedlawski) 383.3–406.5, is very sol. in C_6H_6 , $CHCl_3$, and HOAc, moderately sol. in acetone and EtOAc, slightly sol. in alc., and very slightly sol. in Et_2O . $C(NO_2)_4$ gave a yellow color

with L_1 in $CHCl_3$. L_1 in Ac_2O poured carefully onto a layer of concd. H_2SO_4 gave an orange to red contact ring. Sapon. of lactone L_1 : To L_1 in 20 cc. neutral alc. is added 25 cc. $N/2$ alc. KOH and the mixt. refluxed on a water bath 1 hr. and titrated hot with $N/2$ HCl to phenolphthalein end point. The sapon. no. was 140.31-140.37; one CO_2H is demonstrated in L_1 . Repts. of L_1 from the titrated soln., which has been dild. with H_2O and acidified with HCl, gives the same product, m. 216° (no depression of the mixed m.p.). Sapon. and demonstration of the lactone linking in lactone L_1 : The lactone in 20 cc. alc. and 25 cc. $N/5$ alc. KOH, is refluxed 1 hr. on a water bath and titrated hot with $N/5$ HCl against phenolphthalein; 30 cc. $N/5$ HCl is added to the titrated soln., the mixt. refluxed 2 hrs. on a water bath, and the soln. titrated with $N/5$ alc. KOH. The mol. wt. calcd. from this expt. is 395.2-403.5. Lactone L_1 can be isolated from the last titrated soln. by acidification with HCl and crystn. from alc. Acetylation of lactone L_1 : Lactone L_1 (1.5 g.) in 30 cc. of a mixt. of equal parts CH_3N and Ac_2O , let stand 48 hrs. in the dark, then poured into H_2O acidified with H_2SO_4 and let stand 1 hr., the ppt. formed filtered off, washed in H_2O , dried in air, dissolved in HOAc, reprecip. by pouring into water acidified with H_2SO_4 , washed with H_2O , dried, first in air, then over concd. H_2SO_4 , and the product purified by recrystn. several times from alc., gives colorless needles, m. 216° , m.p. not depressed on mixing with pure L_1 . Br deriv. of lactone L_1 , $C_{11}H_{12}O_5Br$ (I): To L_1 (1 g.) in 60 cc. $CHCl_3$, at 5° , add in small portions with stirring a dil. soln. of Br in $CHCl_3$ until the soln. is permanently (2-3 min.) colored yellow. The $CHCl_3$ is removed by blowing (air?) through the soln. and the residue is dried in a vacuum desiccator. The dried residue is dissolved in a little $CHCl_3$ and pptd. by addn. of Et_2O or acetone (a double or triple vol.) and the process repeated several times to give a pure product m. $219-21^\circ$ (m.p. is detd. rapidly by heating the capillary tube in concd. H_2SO_4 , preheated to 200°), sol. in $CHCl_3$, slightly sol. in alc. and acetone, very slightly sol. in Et_2O and

petr. ether. The Beilstein halogen test is pos. L_1 is debrominated by refluxing 0.5 g. with 50 cc. 25% alc. (MeOH) KOH 30 min. on a water bath, acidifying the mixt. with HCl, filtering off the ppt., and washing it with H_2O and air-drying to give prisms, m. $228-29^\circ$ (from alc.); the Beilstein test for halogens is neg.; a soln. of the debrominated product in $CHCl_3$ turns yellow on addn. of 2 drops of a soln. of Br in $CHCl_3$. Oxime of the lactone L_1 , $C_{11}H_{12}O_5N$ (II): To 0.5 g. L_1 in 50 cc. alc. add 1 g. $NH_2OH \cdot HCl$ and 1.5 g. fused NaOAc in a little H_2O , reflux, and then boil on a water bath 3.5-4 hrs. to conc. the soln. During the process a little ppt. is formed; more is obtained after leaving the reaction mixt. overnight. The ppt. is filtered off, washed with H_2O , then with alc., dissolved in a mixt. of MeOH or EtOH with $CHCl_3$, the soln. clarified by shaking with charcoal, and then concd. to give in a little while colorless prisms, recrystd. several times, m. $278-81^\circ$ (decomp.) (bath preheated to 250°), moderately sol. in HOAc and $CHCl_3$, slightly sol. in C_6H_6 , very slightly sol. in MeOH, EtOH, Et_2O , and acetone. Desoxygenation: To 0.5 g. II dissolved in 15 cc. 90% HOAc with heating is added 5 cc. 25% HCl, the mixt. heated 1 hr. on a water bath, then poured into water with stirring. The ppt. is filtered off, washed in H_2O , and dried in air, yielding colorless needles, m. 216° (from alc.), does not depress the m.p. of the pure L_1 . Isolation, purification, and properties of the lactone L_2 , $C_{11}H_{12}O_4$, mol. wt. 392.6: The crude L_2 salt of L_2 is dissolved by heating in alc. and the soln. poured into H_2O . On addn. of HCl to the soln. a ppt. is formed (pptn. is completed by allowing to stand). The crystals are filtered off, washed in H_2O , dried in air, redissolved in alc., reprecip. from dil. HCl several times, and the purified lactone then recrystd. from acetone as colorless platelets. From alc.- Et_2O needles are obtained. Repeated crystn. gives a pure product, m. 184° ; the yield is about 17% of the total weight of the resin alc. L_2 is sol. in alc. and acetone and slightly sol. in Et_2O , HOAc, and Ac_2O . The $C(NO_2)$ test is neg. for L_2 in $CHCl_3$. The Ac_2O test gives a reddish brown contact ring when L_2 dissolved in this reagent is poured onto a layer of concd. (90%) H_2SO_4 .

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
PROCESSING AND PROPERTIES NOTES																			
<p>The Rast mol. wt. detn. gives 344.4, the Swietoslawski detn., 379.8. Acetylation of lactone L₁: Acetylste 1.5 g. L₁ as given under the procedure for acetylation of L₁. The product is crystd. from acetone as colorless platelets; recrystd. from Ac₂O, acetone, or alc., the pure product, m. 184°, does not depress the m.p. of pure L₁. Sapon. of L₁: Proceed as stated under the sapon. of L₁. Presence of one CO₂H is demonstrated. The lactone is regained from the sapon. liquid by pouring the latter into H₂O and pptg. L₁ out with HCl. The ppt., washed with H₂O, dried in air, and recrystd. from acetone in colorless platelets, m. 184°. Sapon. and demonstration of the lactone link in L₁:</p>										<p>The technique is the same as that described under the procedure for L₁. The mol. wts. obtained from this expt. are 405.7 and 378.9. L₁ is regained from the titration medium by pouring the liquid into water, acidifying with HCl, and recrystg. from alc. or acetone. The K salt of L₁ crystd. out of the colloidal aq. soln. of the oxidation product, gotten from the oxidized mixt. of resin alcs. as stated earlier, on addn. of KOH. Recrystn. from alc. gives crystals in the form of scales. Distillate of L₁, C₁₀H₁₂O₂N₂, obtained similarly to II, crystd. from CHCl₃-MeOH (1:3) as colorless needles; after repeated recrystn. it m. 203° (decompn.). Composition of the oxidation product: Separate investigation has shown that this product contains only 25% of the lactone mixt. Acids of unknown constitution formed as a result of the oxidation of the resin alcs. constitute 50% of the oxidation product, while the remainder (25%) consists of various products, mostly of aldehydic or ketonic character. Separation of the neutral product from the lactone mixt. and from the acidic portion of the oxidation product: When the mixt. of K salts of L₁ and L₂ is isolated by addn. of KOH to the colloidal soln. contg. the oxidation product, the acid portion of the latter remains in the alk. mother liquor, while the neutral product, consisting mostly of a mixt. of aldehydes and/or ketones, remains in the ppt. together with the lactone salts. It is sepd., along with the salt of L₁, from the salt of L₂ by soln. in acetone, and from the salt of L₁ by alkalinizing the filtrate with 15% KOH, whereupon an oily layer forms which can be decanted. The oily layer and the acid mixt. were not studied further.</p> <p>C. S. Shapiro</p>									
ASAC-51A METALLURGICAL LITERATURE CLASSIFICATION																			
RECORD SYMBOL																			
RECORD NO. 151																			
RECORD NO. 151																			

17

CA

Chemical reactions of colchicine and colchicine.

D. Marković and V. Vuković-Kovačević. *Farm. Glasnik* 9, 65-70(1947).—Sapon. of colchicine (I) to colchicine (II) by means of NaOH instead of HCl gives a more sensitive reaction in less time. I or II dissolved in 2% HCl absorbed on filter paper gives a yellow-green spot, which exposed to Br vapors becomes discolored. After being exposed to ammonia vapors it becomes bright green-yellow. To distinguish between I and II a filter paper is used contg. traces of Fe. II dissolved in 2% HCl gives a yellow to brownish green spot, while I does not change its color. F. C. Katus

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

RESEARCH UNIT (REV. 1961)

RESEARCH UNIT (REV. 1961)

1ST AND 2ND CROISS
PROCESSES AND PROPERTIES INDEX

CA

The determination of melting points of organic pharmaceutical chemical preparations. V. Vukčević-Kovčević. Farm. Glasnik 4, 121-4(1948).—A review on capillary methods as prescribed and recommended by various national pharmacopoeias. R. J. F.

17

ACR-11A METALLURGICAL LITERATURE CLASSIFICATION

CA

11

Identification of some pharmaceutical-chemical preparations. II. V. Vuković-Kovčević (Zavod Farmaceut-
sku Kem. Sveučilišta u Zagrebu, Jugoslavia). *Farm.*
Glasnik 9, 193-200(1949); C.A. 43, 9306i. — Chem. reac-
tions for the identification of aminophylline, aneurine-
HCl, Ca mandelate, sodium hexobarbital, histamine phos-
phate, histidine-HCl, and riboflavine are described.
E. J. Frelsh

CA

17

Identification and approximate determination of diethylstilbestrol in tablets. V. Vukobrat-Kovacevic and V. Pintic. *Pharm. Glasnik* 8, 105 (1940). - A modification of Cocking's reaction (C.A. 40, 2418) for the detn. of diethylstilbestrol (I) by using as reagent Br vapor instead of its soln. in glacial AcOH is described. When one drop (0.01 cc.) of a soln. of I in glacial AcOH is placed on a piece of filter paper and exposed to Br vapor for 0.5 min. a color reaction starts to appear one min. following the exposure. Concd. solns. of I give a colorless spot with a violet-red border. Dild. solns. are characterized by a border becoming larger and brighter in color, surrounded by a light yellow zone, while the spot itself becomes light violet. Very dild. solns. of I give a spot pink-violet in color without any border. Sensibility of the reaction-limit quantity: 2.5 γ I in 0.01 cc.; limit concn. 1:4000. The sensibility of the reaction can be increased by the following modification. After exposure to Br vapor,

the spot is exposed for 10 min. to warm air (about 70°). A drop of H₂O is placed on the spot which is redispersed to Br vapor for 0.5 min. The whole spot thus becomes violet and then orange-red in color. Limit quantity 0.2 γ I in 0.01 cc.; limit concn. 1:50,000. On the basis of differences in the reaction obtained with Br vapor on filter paper with various concns. of I, a procedure was developed for simultaneous identification and approx. detn. of I in tablets contg. 1 mg., 0.5 mg., and 0.1 mg.: Three tablets are reduced to powder in a narrow 10 cc. test tube by means of a glass rod. After adding 1 cc. of glacial AcOH, the mixt. is heated on a small flame for a short time and allowed to stand until cool and the undissolved part of the tablets has settled. Carry out the reaction with one drop of the clear supernatant (soln. 1). Thereafter, 2 cc. of glacial AcOH is added and the mixt. heated again on a small flame for a short time (soln. 2) and after cooling, the reaction with Br vapor is repeated. If the tablets contain 1 mg. of I, both soln. 1 and soln. 2 give a colorless spot with a violet pink border. If the tablets contain 0.5 mg. of I, soln. 1 gives a colorless spot with a violet-pink border, while soln. 2 gives a pale violet spot without any border. If the tablets contain 0.1 mg. of I soln. 1 gives a pale violet spot, while soln. 2 gives a neg. reaction, but after exposure to warm air (about 70°) for 10 min. and thereupon again to Br vapor for 0.5 min. the spot becomes orange-red in color. R. J. Prelich

CA

17

Identification and approximate determination of histidine by means of bromine in the presence of nitric acid. Vukobrat-Kovacevic and T. Rikan-Plicker (Univ. Zagreb). *Arch. Pharm. Jussieu*, 1, 53-62 (1951) (English summary); cf. C.A. 44, 2701c. A new modification of Knoop's reaction (cf. *Hofmeisters Beitr.* 11, 388 (1908)) is described. One drop (0.01 ml.) of histidine hydrochloride (1) soln. in 25% HNO₃ is placed on filter paper (Schleicher & Schull No. 588), the spot exposed to Br vapors for 1 min. and then to vapor of boiling H₂O for 1 min.; this is repeated on two fresh spots but the exposure to Br is prolonged to 3 and 5 min., resp. With 5% and more concd. I solns. deep blue-violet spots are obtained in all 3 tests, but solns. contg. less than 5% I give 3 spots differing in color and in color distribution (similar results are obtained by changing the concn. of HNO₃ or the time of exposure to Br or H₂O vapors). I can be identified by means of this reaction by using a 5% and then a more dil. soln. in 25% HNO₃. I can be detd. approx. ($\pm 10\%$ error) by using a series of I solns. of varying concns. for comparison. The method can also be used as a simple control test for injections contg. I and, since histamine does not give this reaction, as a test for I in histamine drugs. The Knoop reaction is pos. in the presence of HCl or H₂SO₄ but neg. in the presence of HNO₃. 30 references.

S. Edmund Berger

NIKOLIC, Bozidar; NIKOLIC, Vladislava; PAVLOVIC-KENTERA, Vera;
VUKCEVIC, Zlatija; KORAC, Danica

The protein system of normal infants. Srpski arh. celok.
lek. 90 no.9:809-817 S '62.

1. Institut za medicinska istrazivanja u Beogradu Direktor:
prof. dr. Bozidar Dordevic. Centar za odojce i malo dete u
Beogradu Upravnik: prim. dr. Zlatija Vukcevic. Pedijatrijska
klinika Medicinskog fakulteta Univerziteta u Beogradu
Upravnik: prof. dr. Borivoje Tasovac.
(BLOOD PROTEINS)

VUKCEVIC, Zlatija; POPOVIC, Drago jub; MILOJICIC, Bezena; JOVANOVIC,
Mitena

Epidemic pneumonia in the midst of premature births in Belgrade.
Wlad. parazyt. 10 no.4:315-316 '64.

COUNTRY	: Yugoslavia	H-17
CATEGORY	:	
ABST. JOUR.	: RZKhm., No. 21 1959, No.	75819
AUTHOR	: Vukcevic-Kovacevic, V., and Bozin, Z.	
INST.	: Not given	
TITLE	: The Qualitative Analysis of Extracts and Tinctures of Some Alkaloids by Filter Paper Chromatography	
ORIG. PUB.	: Farmac Glasnik, 14, No 7, 331-338 (1958)	
ABSTRACT	: The application of filter paper chromatography to the qualitative analysis of the following preparations has been studied: Extractum Belladonnae siccum, Tinctura Belladonnae, Extractum Hydrastidis fluidum, Extractum Sesalis cornuti dilutum, Extractum Strychni siccum, Tinctura Strychni, and Tinctura Veratri. The following procedure was used: 1 drop (0.01 ml) of the solution to be analyzed (in the case of dry extracts 10% solutions in 70% C ₂ H ₅ OH were prepared) is deposited on the starting	

CARD: 1/3

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COUNTRY : Yugoslavia H-17
CATEGORY :
ABS. JOUR. : AZKhim., no. 21 1959, No. 75819
AUTHOR :
INSTR. :
TITLE :
ORIG. PUB. :
ABSTRACT : line on the strip of filter paper (Whatmann No 1).
After evaporation of the solvent the chromatogram
is developed for 10 min with 0.1 N HCl. The al-
kaloid spots are located by irradiation of the
dry strip with UV light, spraying with picric
acid, Dragendorff reagent, and 1% solution of I₂
in C₂H₅OH, or by treating the moistened strip with
Br₂ vapors followed by treatment with NH₃ vapor
(for preparations of strychnine and hydrastinine).
This exceedingly simple method can be success-

CARD: 2/3

Analysis of mixtures of adrenaline and procaine by means of filtration chromatography

V. Vukobratović Kovšević and
H. Živković, *Pharm. Zbornik, Zagreb, Yugoslavia, Acta
Pharm. Jugoslavica* 6: 217 (1974). Solns. and tablets of procaine
HCl (I) used in computers contain small quantities of
adrenaline (II) or adrenaline-HCl (III). Separ. of II and III
from I can be accomplished even if the ratio of the com-

ponents is 1:1000 and the concn. of II is as low as 1:50,000.
Procedure: 1 cc. of a HCl soln. contg. not less than 1.2% of
II or III, 0.003 ml. is mixed with 0.5 ml. of 15% NaOH
and immediately filtered through a small filter, sealing the
point of the filter against the starting line of a strip of What-
man No. 1 filter paper until the spot of the starting line be-
comes about 1 cm. in diam. When the spot is dried, the
chromatogram is run by the ascending technique for 20-30
min. The solvent is 95:1 EtOH. Localization of the
components is carried out by spraying the paper with 1%
soln. of iodine in 95% EtOH and holding it in steam. On
the start I is detected as circular pink spot, while III is found
to be on the front as brown orange spot. L. Rican, FMIR.

YUGOSLAVIA/Chemical Technology. Chemical Products and Their
Application. Medicinals Vitamins. Antibiotics.

H-17

Abs Jour: Ref Zhur-Khim., No 13, 1958, 44321.

Author : Vukcevic-Kovacevic Vera, Bozin Zora.

Inst :

Title : Analysis of Cinchona Bark Tinctures by the Method
of Filtration Chromatography.

Orig Pub: Acta pharmac. jugosl., 1956, 6, No 3-4, 243-246.

Abstract: The procedure consists in placing one drop (0.01 ml)
of the tincture (about 0.70% and 0.35% alkaloids),
by means of a capillary tube, on the starting line
of a strip of paper, at a distance of 4 cm from its
end. After evaporation of the solvent the chromato-
gram is treated for 10 minutes with 0.1 N HCl acid, as
a solvent. Displacement of alkaloids is determined

Card : 1/2